

What is claimed is:

1. A stent comprising:

a plurality of annular elements, each annular element having a compressed state and an expanded state, wherein each annular element has a longitudinal dimension which is smaller in the expanded state than in the compressed state; and
at least one connecting member connecting adjacent annular elements, the connecting member having a longitudinal dimension which is larger in the expanded state than in the compressed state, and the connecting member being straight when the annular elements are in the compressed state and in the expanded state.

2. The stent of claim 1, wherein each annular element comprises a plurality of alternating struts and apices connected to each other to form a substantially annular configuration.

3. The stent of claim 2, wherein the connecting members are connected to the apices of the adjacent annular members.

4. The stent of claim 2, wherein the plurality of struts comprises left and right struts, with each pair of left and right struts connected to each other at an apex.

5. The stent of claim 2, wherein each strut has a longitudinal dimensional which is smaller when the annular elements are in the expanded state than in the compressed state.

6. The stent of claim 2, wherein each strut has a longitudinal dimensional which is larger when the annular elements are in the compressed state than in the expanded state.

7. The stent of claim 1, wherein the connecting member has a smaller longitudinal dimension when annular elements are in the compressed state than in the expanded state.

8. The stent of claim 1, wherein the stent is made from a shape memory alloy.

9. The stent of claim 8, wherein the shape memory alloy is Nitinol.

10. The stent of claim 1, wherein each connecting member defines an
5 angle with respect to the longitudinal axis of the stent, with the angle being greater
when the annular elements in the compressed state than when the annular elements
are in the expanded state.

11. The stent of claim 1, wherein the at least one connecting member
10 comprises a plurality of connecting members, with all of the plurality of connecting
members oriented at the same angle in the same direction with respect to the
longitudinal axis of the stent when the annular elements are in the expanded state.

12. The stent of claim 1, wherein the at least one connecting member
15 comprises a plurality of connecting members that define a plurality of rows of
connecting members, wherein the connecting members in one row of connecting
members are oriented in a different direction with respect to the connecting members
in an adjacent row of connecting members.

13. The stent of claim 1, wherein the connecting member is connected to
20 adjacent annular elements at two separate locations that are along the same
longitudinal axis of the stent.

14. The stent of claim 1, wherein the connecting member is connected to
25 adjacent annular elements at two separate locations that are disposed at an angle
with respect to the longitudinal axis of the stent.

15. The stent of claim 1, wherein the at least one connecting member
comprises a first connecting member and a second connecting member, with the first
30 and second connecting members connected to a first annular element along two
separate locations thereof, and with the first and second connecting members
connected to an adjacent second annular element at a single location.

16. The stent of claim 15, wherein the two separate locations are two separate apices along the first annular element, and the single location is an apex along the second annular element.

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17. The stent of claim 1, wherein each connecting member is devoid of any points of inflection.

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